Notes on Aplysia dactylomela. By G. E. Dobson, M.A., M.B., F.L.S., &c.

[Read June 17, 1880.]

THE specimen which forms the subject of the following notes was obtained by Mr. R. Vacy Ash, M.B., Surgeon, Army Medical Department, in February last, at Bermuda. It agrees so closely in size, and in the coloration and shape of the body and shell, with the figures and description given by Rang of his Aplysia dactylomela*, from the Cape-Verd Islands, that I have little hesitation in recognizing it as an example of that species, though from the opposite side of the Atlantic.

The specimen in question was found in shallow water inside the reef fringing the island, and was seen through the clear water moving along on the bottom, the lateral swimming-lobes keeping up a gentle undulatory motion. Mr. Ash describes its colour as a rich drab, marked all over with circles and streaks of velvet-black, the latter most abundant on the mantle covering the shell and on the lateral swimming-lobes. The shell agrees in all respects with that of A. dactylomela as figured by Rang, and the only difference observable is that the margins of the swimming-lobes are not tinged with violet. This might be accounted for by supposing that such a fugitive colour had disappeared in the alcohol, but the captor does not remember to have seen it in the living animal.

The following points appear not to have been previously noted:—

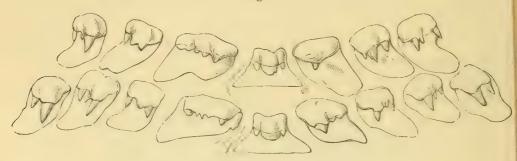
The lingual ribbon is nearly as wide as long, and supports about 75 rows of recurved teeth, having the formula 43-1-43, representing the number in a row taken at the widest part.

In fig. 1, where portions of two tooth-rows from the centre of the lingual ribbon are shown, the median or rhachidian tooth is smaller than the lateral teeth, and has a blunt central cusp with two small lateral cusps. The bluntness of the central cusp may, however, be due to wear, although throughout the 75 rows this cusp presents the same character. It may also be observed that the first teeth to left and right of the median tooth are not symmetrically developed, the left tooth being much larger

^{*} Rang, 'Histoire Naturelle des Aplysiens,' p. 56, pl. ix. (1828).

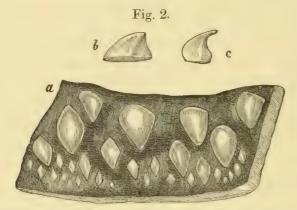
than the right; and this inequality is continued throughout the series*.

Fig. 1.



Lingual teeth of Aplysia dactylomela, \times 58 diam.

The mandibles, or labial plates, are invested internally with a rough leathery substance, which, as seen by a $\frac{1}{4}$ objective, consists of indurated cylindrical rod-like bodies, imbricated, with rounded extremities, forming a depressed pile, very similar to the corresponding structure in Triton.



Gizzard of A. dactylomela cut open, showing position and relative sizes of spines (natural size).

The gizzard is armed with about thirty-three horny tooth-like spines, the arrangement of which is shown in fig. 2, a, above, where the position of their bases is indicated. The leading forms of these spines are shown at b and c, where two of the largest are figured of the natural size. The very capacious stomach of the animal was found to be filled with undigested food, consisting chiefly of a minute species of Algæ.

^{*} As in other species of Gasteropoda, an abnormality occurring in one of the lingual teeth is repeated in the longitudinal series to which it belongs.